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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,458	01/14/2002	Carl S. Brown	11532-036001	1033

7590 12/16/2003

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EXAMINER

KASSA, YOSEF

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 12/16/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/047,458

Applicant(s)

BROWN ET AL.

Examiner

YOSEF KASSA

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/15/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Response to Arguments

1. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Weissman (5,694,212).

Regard to claim 1, Weissman discloses collecting calibration data (see col. 2, lines 50-60); determining the positioning and orthogonality errors from the calibration data (see col. 2, lines 50-60); creating a solution model, i.e., stored position value, based on positioning and orthogonality data (see col. 3, lines 5-13).

Regard to claim 2, Weissman discloses further comprising modifying the position an image area based on the solution model (see col. 3, lines 5-9).

With regard to claim 3, Weissman discloses further comprising modifying the positioning of a mechanical system to compensate for errors based on the solution model (see col. 3, lines 34-43).

With regard to claim 4, Weissman discloses further comprising determining calibration data based on stepping data (see col. 4, lines 1-8).

With regard to claim 5, Weissman discloses further comprising determining calibration data based on slide data using a reference slide (see col. 4, lines 9-17).

With regard to claim 6, Weissman discloses further comprising determining calibration data based on sub-spot data (see col. 4, lines 17-22).

With regard to claim 7, Weissman discloses further comprising determining calibration data based on absolute data (see col. 4, lines 25-34).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weissman (5,694,212), and further in view of Jansson et al (4,760,385).

With regard to claim 8, Weissman discloses determining calibration data (see col. 2, lines 37-47); creating adjustment parameters based on the calibration data (see col. 2, lines 50-60); applying the adjustment parameters to position a first portion of the plurality of specimens within a scan area (see col. 2, lines 60-67).

Weissman did not explicitly call for obtaining an image of the first portion of the plurality of specimens; applying the adjustment parameters to position a second portion of the plurality of specimens within a scan area; obtaining an image of the second

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portion of the plurality of specimens; and combining the image of the first portion and the image of the second portion to create the image of the plurality of specimens. In the same field of endeavor, However, Jansson et al teaches this feature (see col. 2, lines 15-21 and col. 2, lines 65-col. 3, lines 1-2). At the time of the invention, it would have been obvious to incorporate the teaching of Jansson et al microscope imaging system and into Weissman's system. The motivation for doing so is to calibrating image pixel of an object obtained from a look up table, and maximum mosaic image size is computed and displayed see col. 5, lines 12-22 of Jansson et al.

With regard to claim 9, Weissman is silent about obtaining an image of a plurality of portions of the plurality of specimens, wherein a location of each of the plurality of portions is adjusted based on the adjustment parameters (see col. 3, lines 1-18 of Jansson et al); and stitching together each of the images of the plurality of portions of the plurality of specimens (see col. 2, lines 34-44 of Jansson et al).

Claims 10-13 are similarly analyzed as claims 4-7.

With regard to claim 14, Weissman discloses a processor which collects calibration data from the staging area (see col. 6, lines 1-7), wherein the processor creates an adjustment algorithm to modify movement of the staging area to compensate for the calibration data (see col. 3, lines 5-13).

Weissman did not explicitly call for a staging area moves relative to a camera. In the same field of endeavor, However, Jansson et al teaches this feature (see col. 5, lines 34-col. 6, lines 1-5). At the time of the invention, it would have been obvious to incorporate the teaching of Jansson et al microscope imaging system and into

Weissman's system. The motivation for doing so is to calibrating image pixel of an object obtained form a look up table, and maximum mosaic image size is computed and displayed see col. 5, lines 12-22 of Jansson et al.

With regard to claim 15, Weissman silent about the calibration data is based on a bright spot within the scan area, this feature is thought by Jansson et al (see col. 5, lines 5-22).

With regard to claim 16, Weissman silent about the staging area is positioned to collect a plurality of images, each of the plurality of images comprising a portion of the total desired image, this feature is thought by Jansson et al (see col. 2, lines 38-45).

Claim 17 is similarly analyzed as claim 16.

With regard to claim 18, Weissman discloses wherein the calibration data is obtained without the use of a reference slide (see col. 3, lines 5-9).

Claim 19 is similarly analyzed as claim 5.

Other Prior Art Cited

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (5,825,670) to Chernoff et al discloses high precision calibration and feature measurement system for a scanning probe microscope.

US Patent No. (5,499,097) to Ortyn et al discloses method and apparatus for checking automated optical system performance repeatability.

US Patent No. (5,050,112) to Hedglen et al discloses specimen coordinate automated measuring machine/fiducial automated measuring machine.

US Patent No. (5,018,209) to Bacus discloses analysis method and apparatus for biological specimens.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (703) 306-5918. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

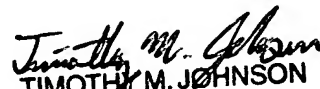
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on (703) 308-5246. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communication and (703) 872-9306 for after Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (703) 306-5631. The group receptionist number for TC 2600 is (703) 305-4700.

PATENT EXAMINER

Yosef Kassa

12/05/03.


TIMOTHY M. JOHNSON
PRIMARY EXAMINER